

1 This listing of claims replaces all prior versions and listings:

2
3 **Listing of Claims:**

4
5 1. (currently amended) A method, comprising:

6 periodically identifying a location of a first computer that is used by a first
7 computer user and wherein periodically identifying comprises transmitting the
8 location of the first computer to a network server during each of several recurring
9 time periods;

10 receiving a request from a computing unit for the location of the first
11 computer user;

12 determining the last known location of the first computer;

13 transmitting the location of the first computer to the computing unit; and

14 recognizing the location of the first computer as the location of the first
15 computer user.

16
17 2. (original) The method as recited in claim 1, wherein the first
18 computer is a mobile computer operating within a wireless network.

19
20 3. (currently amended) The method as recited in claim 1, wherein the
21 periodically identifying a location of the first computer comprises:

22 associating the first computer user with the location of the first computer;

23 transmitting the location of the first computer and the associated first
24 computer user to a the network server during each of several recurring time
25 periods; and

1 storing the transmitted information on the network server.

2
3 4. (original) The method as recited in claim 1, wherein the location of
4 the first computer is represented in absolute geographical coordinates.

5
6 5. (original) The method as recited in claim 1, wherein the location of
7 the first computer is represented in coordinates relative to a known absolute
8 location.

9
10 6. (original) The method as recited in claim 1, wherein the location of
11 the first computer is represented as a geographical unit.

12
13 7. (original) The method as recited in claim 1, wherein the periodically
14 identifying a location of the first computer further comprises:

15 associating the first computer user name with the location of the first
16 computer;

17 transmitting the location of a network node to which the first computer is
18 connected, the transmitting occurring once during each of several recurring time
19 periods; and

20 storing the location of the network node on a network server together with
21 the first computer user name.

22
23 8. (original) The method as recited in claim 1, further comprising time-
24 stamping the location of the first computer with the time that the first computer
25 was identified.

1
2 9. (original) The method as recited in claim 1, wherein the determining
3 the last known location of the first computer further comprises determining the
4 location of the first computer that has a most recent time stamp.

5
6 10. (original) The method as recited in claim 1, wherein the determining
7 the last known location of the first computing unit further comprises:

8 calculating a time differential between a current time and the time stamp of
9 a most recent location identified for the first computer;

10 comparing the time differential with a pre-defined time threshold;

11 defining the last known location of the first computer as the most recent
12 location if the time differential is less than the time threshold; and

13 invoking a location tracking service to identify a current location of the first
14 computer as the last known location if the time differential is greater than the time
15 threshold.

16
17 11. (original) The method as recited in claim 1, wherein:

18 the periodically identifying a location of a first computer that is used by a
19 first computer user further comprises periodically identifying a location of at least
20 a second computer that is used by the first computer user and detecting an active
21 signal from the computer that was most recently used by the first computer user;
22 and

23 the determining the last known location of the first computer comprises
24 determining the last known location of the computer indicating the active signal.
25

1 12. (original) The method as recited in claim 1, wherein the determining
2 the last known location of the first computing unit further comprises:

3 searching a server database having a plurality of computer users and
4 locations contained therein; and

5 identifying a location associated with the first computer user.

6
7 13. (original) The method as recited in claim 1, further comprising
8 registering the first computer, and wherein the identifying a location of the first
9 computer only occurs upon the receiving a request from the computing unit for the
10 location of the first computer.

11
12 14. (original) The method as recited in claim 1, wherein the last known
13 location of the first computer is transmitted to the computing unit upon a request
14 by the computing unit only if the computing unit is authorized to determine the
15 location of the first computer.

16
17 15. (original) The method as recited in claim 1, further comprising
18 encrypting the location of the first computer prior to transmitting the location of
19 the first computer.

20
21 16. (original) A method, comprising:
22 determining a location of a computing unit;
23 periodically transmitting, from the computing unit, the location of the
24 computing unit to a network server together with a user name of a user using the
25 computing unit; and

1 including an active signal with the periodically transmitted information
2 when the user is actively using the computing unit.

3
4 17. (original) The method as recited in claim 16, wherein:
5 the computing unit is a mobile computing unit; and
6 the network server is a wireless network server.

7
8 18. (original) The method as recited in claim 16, further comprising
9 time-stamping the transmission to the network server and transmitting the time
10 stamp with the transmitted information.

11
12 19. (original) The method as recited in claim 16, wherein the
13 determining a location of a computing unit comprises receiving RF signals from a
14 plurality of RF beacons having known locations and using environmental profiling
15 to establish the location of the computing unit.

16
17 20. (original) The method as recited in claim 16, wherein the location is
18 rendered in latitude and longitude coordinates.

19
20 21. (original) The method as recited in claim 16, wherein the location is
21 rendered in latitude, longitude and altitude coordinates.

22
23 22. (original) The method as recited in claim 16, wherein the location is
24 rendered in coordinates relative to a known location.
25

1 **23.** (original) The method as recited in claim 16, wherein the location is
2 rendered as a geographical unit.

3
4 **24.** (original) The method as recited in claim 16, wherein the location of
5 the computing unit is the known location of a network node to which the
6 computing unit is connected.

7
8 **25.** (original) The method as recited in claim 16, wherein the user
9 actively using the computing unit further comprises the user having used the
10 computing unit within a pre-defined time period.

11
12 **26.** (original) The method as recited in claim 16, wherein the
13 periodically transmitting the location of the computer unit to a network server only
14 occurs upon a request from the network server for the computer unit to update the
15 location of the computer unit.

16
17 **27.** (original) The method as recited in claim 16, further comprising
18 encrypting the location of the computing unit prior to transmitting the location of
19 the computing unit to the network server.

1 28. (original) A system, comprising:

2 a server having memory;

3 a user database stored in the memory of the server, the user database
4 containing a user field for storing a user name of a mobile computer user, and a
5 last known location field for storing a most recent location of a computer user
6 identified in a corresponding user field;

7 a wireless access point configured to receive network transmissions from
8 one or more mobile computers;

9 a mobile computer having memory and a wireless network interface for
10 communication with the wireless access point;

11 a location tracking system in the mobile computer memory configured to
12 determine a location of the mobile computer;

13 a location manager in the mobile computer memory configured to
14 periodically transmit the location of the mobile computer and the user name of a
15 mobile computer user to the server via the wireless network interface; and

16 a computing unit having a computing unit location manager configured to
17 search the user database of the server to determine information regarding the
18 location of a mobile user.

19
20 29. (original) The system as recited in claim 28, wherein the computing
21 unit is a stationary computing unit.

22
23 30. (original) The system as recited in claim 28, wherein the computing
24 unit is a mobile computing unit.
25

1 **31.** (original) The system as recited in claim 28, wherein:
2 the mobile computer further comprises a clock;
3 the location manager is further configured to transmit a time of transmission
4 to the server together with the location and user name information; and
5 the user database further comprises a time field for storing the time that a
6 transmission identifying the location of the mobile user and the user name of the
7 mobile computer user is received from the mobile computer.

8
9 **32.** (original) The system as recited in claim 28, wherein the user
10 database further comprises an active field indicating if the mobile computer user
11 has used the mobile computer within a specified time period.

12
13 **33.** (original) The system as recited in claim 28, wherein the location
14 manager transmits the location of the mobile computer in absolute coordinates.

15
16 **34.** (original) The system as recited in claim 28, wherein the location
17 manager transmits the location of the mobile computer in coordinates relative to a
18 known absolute location.

19
20 **35.** (original) The system as recited in claim 28, wherein the location
21 manager transmits the location of the mobile computer as a geographic unit.

22
23 **36.** (original) The system as recited in claim 28, wherein the location
24 manager transmits the location of a network node with which the mobile computer
25 is communicating as the location of the mobile computer.

1 37. (original) The system as recited in claim 28, wherein:
2 the mobile computer is a first computer;
3 the system further comprises a second computer having a location manager;
4 the user database further comprises an active field;
5 the mobile computer user is logged onto both the first mobile computer and
6 the second computer;
7 the location manager of the first computer and the location manager of the
8 second computer are further configured to transmit an active signal for a specified
9 period of time after the respective computers are used;
10 the active field corresponding to the first computer indicating the mobile
11 computer user last used the first computer when the active signal is transmitted
12 from the first computer;
13 the active field corresponding to the second computer indicating the mobile
14 computer user last used the second computer when the active signal is transmitted
15 from the second computer; and
16 only one active field indicating activity by the mobile computer user at any
17 given time.

18
19 38. (original) The system as recited in claim 28, wherein:
20 the user database further comprises an OK field that contains data that
21 identifies one or more system users that are authorized to receive data regarding
22 the location of the mobile computer user identified in the corresponding user field.
23
24
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1 39. (original) The system as recited in claim 28, wherein the location
2 manager of the computing unit is further configured to:

3 search the user database to locate an entry for a specific user;
4 calculate a time differential between a current time and a time stored in the
5 time field corresponding to the specific user if the specific user is found;
6 compare the time differential to a time threshold;
7 recognize the location contained in the last known location field
8 corresponding to the specific user as the location of the specific user if the time
9 differential is within the time threshold;

10 transmit a signal to cause the location manager of the mobile computer to
11 invoke the location tracking system of the mobile computer if the time differential
12 is not within the time threshold, to determine the location of the mobile computer
13 and transmit location and user information to the server where it is stored in the
14 user database; and

15 recognize the newly stored location contained in the last known location
16 field corresponding to the specific user as the location of the specific user.

17
18 40. (original) A network server, comprising:
19 memory;
20 a user database stored in the memory containing one or more records, each
21 record including:

22 a user field in the user database to store a user identifier; and
23 a last known location field in the user database to store a most recent
24 location identified for the corresponding user field.
25

1 41. (original) The network server as recited in claim 40, wherein each
2 record further comprises a time field to store a time that the corresponding last
3 known location was stored.

4
5 42. (original) The network server as recited in claim 40, wherein each
6 record further comprises an active field to store an indication of whether the user
7 identified in the corresponding user field has been active on a client connected to
8 the server within a specified period of time.

9
10 43. (original) The network server as recited in claim 40, further
11 comprising a wireless access point to which a mobile computing unit may connect
12 to access the network.

13
14 44. (original) The network server as recited in claim 43, further
15 comprising a connection to wired network components.

16
17 45. (original) A mobile computing unit, comprising:
18 memory;
19 a wireless network interface configured to connect the mobile computing
20 unit to a wireless access point of a remote server;
21 a location tracking service configured to determine a location of the mobile
22 computer unit; and
23 a location manager configured to periodically transmit the location of the
24 mobile computing unit to the remote server via the wireless network interface.
25

1 **46.** (original) The mobile computing unit as recited in claim 45, wherein
2 the location manager is further configured to transmit a user name of a user logged
3 onto the mobile computing unit to the remote server together with the location of
4 the mobile computing unit.

5
6 **47.** (original) The mobile computing unit as recited in claim 45, wherein
7 the location manager is further configured to transmit an active signal to the
8 remote server together with the location of the mobile computing unit when a user
9 logged onto the mobile computing unit has actively used the unit within a specified
10 period of time.

11
12 **48.** (original) The mobile computing unit as recited in claim 45, further
13 comprising a clock, and wherein the location manager is further configured to
14 time-stamp the transmission of the location information with a time that the
15 transmission is sent.

16
17 **49.** (original) The mobile computing unit as recited in claim 45, wherein
18 the location manager identifies and transmits the location of a network node with
19 which the mobile computing unit is communicating as the location of the mobile
20 computing unit.

21
22 **50.** (original) The mobile computing unit as recited in claim 45, wherein
23 the location manager is configured to invoke the location tracking service when
24 commanded to do so by a second computing unit or the server.
25

1 **51.** (original) The mobile computing unit as recited in claim 45, wherein
2 the location manager transmits an absolute location of the mobile computing unit
3 to the remote server.

4
5 **52.** (original) The mobile computing unit as recited in claim 45, wherein
6 the location manager transmits the a location of the mobile computing unit relative
7 to a known absolute location.

8
9 **53.** (original) The mobile computing unit as recited in claim 45, wherein
10 the location manager transmits a geographic region to the remote server as the
11 location of the mobile computing unit.

12
13 **54.** (original) The mobile computing unit as recited in claim 45, wherein
14 the location manager is further configured to encrypt the location of the mobile
15 computing unit before transmitting the location of the mobile computing unit to the
16 remote server.

1 **55.** (original) A method for locating a mobile computer user in a
2 wireless network, comprising:

3 periodically identifying a location of a mobile computer that is used by a
4 mobile user and associating a time stamp with the location indicating a time at
5 which the location was identified;

6 transmitting the location of the mobile computer to a network server
7 together with the time stamp and a name of the mobile user;

8 storing the transmitted information on the network server;

9 receiving a request from a computing unit for the location of the mobile
10 user;

11 determining the last known location of the mobile computer by accessing
12 the network server and finding the location having a most recent time stamp; and

13 recognizing the last known location of the mobile computer as the location
14 of the mobile user.

15
16 **56.** (original) The method as recited in claim 55, wherein the
17 periodically identifying a location of a mobile computer further comprises
18 identifying the location of the mobile user by measuring relative strengths of radio
19 frequency transmissions emitted from a plurality of base stations.

20
21 **57.** (original) The method as recited in claim 55, further comprising:
22 transmitting an active signal together with the location information if the
23 mobile user has actively used the mobile computer within a specified period of
24 time.

25

1 58. (original) A system, comprising:
2 a server having memory;
3 a user database stored in the memory of the server, the user database
4 containing a user field for storing a user name of a mobile computer user, and a
5 last known location field for storing a most recent location of a computer user
6 identified in a corresponding user field;
7 a wireless access point configured to receive network transmissions from
8 one or more mobile computers;
9 a mobile computer having memory and a wireless network interface for
10 communication with the wireless access point;
11 a location tracking system in the mobile computer memory configured to
12 determine a location of the mobile computer;
13 a location manager in the mobile computer memory configured to transmit
14 the location of the mobile computer and the user name of a mobile computer user
15 to the server via the wireless network interface when a request to do so is received
16 from the server; and
17 a computing unit having a computing unit location manager configured to
18 search the user database of the server to determine information regarding the
19 location of a mobile user.

1
2 **59. (new)** A method comprising:

3 receiving, at a server of a wireless network and from a mobile computer
4 within the wireless network, multiple locations of the mobile computer, each of the
5 multiple locations received at recurring time periods;

6 time-stamping each of the multiple locations based on the recurring time
7 periods at which each of the multiple locations is received;

8 receiving, at the server, a request from a computing unit for a current
9 location of a mobile computer user;

10 determining that the mobile computer user is identified with the mobile
11 computer;

12 determining which of the multiple locations has a most-recent time-stamp;
13 and

14 transmitting the location having the most-recent time-stamp to the
15 computing unit.

16
17 **60. (new)** The method of claim 59, wherein the server is integral with a
18 wireless access point.

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1 61. (new) A method comprising:
2 receiving, at a server of a wireless network and sent from a mobile
3 computer within the wireless network, multiple locations of the mobile computer,
4 each of the multiple locations sent at recurring time periods;
5 time-stamping each of the multiple locations based on the recurring time
6 periods at which each of the multiple locations is sent;
7 receiving, at the server, a request from a computing unit for a current
8 location of a mobile computer user;
9 determining that the mobile computer user is identified with the mobile
10 computer;
11 determining which of the multiple locations has a most-recent time-stamp;
12 calculating a time differential between a current time and the most-recent
13 time stamp;
14 comparing the time differential with a pre-defined time threshold; and
15 transmitting the location having the most-recent time-stamp to the
16 computing unit if the time differential is less than that of the pre-defined time
17 threshold; or
18 invoking a location tracking service to identify a more-current location of
19 the mobile computer if the time differential is greater than the pre-defined time
20 threshold;
21 receiving a more-current location of the mobile computer; and
22 transmitting the more-current location to the computing unit.
23
24 62. (new) The method of claim 61, wherein the server is integral with a
25 wireless access point.